

**Air Pollution Control
Title V Permit to Operate**

Date: October 17, 2002

Statement of Basis for Permit No. R10T5-ID-00-02

**Northwest Pipeline Corporation
Fort Hall Reservation
Pocatello, Idaho**

1. EPA Authority to Issue Part 71 Permits

On July 1, 1996 (61 FR 34202), EPA adopted regulations codified at 40 CFR part 71 setting forth the procedures and terms under which the Agency would administer a federal operating permits program. These regulations were updated on February 19, 1999 (64 FR 8247) to incorporate EPA's approach for issuing federal operating permits to covered stationary sources in Indian country.

As described in 40 CFR 71.4(a), EPA will implement a part 71 program in areas where a state, local, or Tribal agency has not developed an approved part 70 program. Unlike states, Indian Tribes are not required to develop operating permits programs, though EPA encourages Tribes to do so. See, for example, Indian Tribes: Air Quality Planning and Management (63 FR 7253, February 12, 1998) (also known as the "Tribal Authority Rule"). Therefore, within Indian country, EPA will administer and enforce a part 71 federal operating permits program for stationary sources until Tribes receive approval to administer their own operating permits programs.

2. The Shoshone-Bannock Tribes

a. Indian Country: The Pocatello compressor station is located within the exterior boundaries of the Fort Hall Reservation and is in Indian Country, as defined in 40 CFR part 71.

b. Reservation: The Fort Hall Indian Reservation was established by the Bridger Treaty of 1868, and set apart lands in SE Idaho as a 1,350 square mile reservation for the Shoshone and Bannock Tribes. The current size is 849.8 square miles (543,900 acres). Today there are 5 districts located within the boundaries of the Reservation. Based on the 2000 Census data, the total enrolled Tribal population of the Reservation is approximately 3,006. The total Reservation Population, of all races, which includes portions of the counties of Bannock, Bingham, Caribou, and Power, is 5,762.

c. Tribal Government: The Shoshone-Bannock operates under a constitution that was approved in .

d. Local Air Quality and Attainment Status:

3. Facility Information

- a. Location: The Pocatello natural gas compressor facility is a privately owned facility which is located at 2605 Gas Plant Road in Power County, Idaho and is doing business within the boundaries of the Fort Hall Reservation and is in Indian Country, as defined by 40 CFR Part 71. The mailing address is:

Williams Gas Pipelines-West
295 Chipeta Way
P.O. Box 58900
Salt Lake City, Utah 84158-0900

- b. Facility Contact/Responsible Official

The facility contact and responsible official is H. Lee Bauerle, Environmental Specialist.

- c. General Description of Operations and Products

Northwest Pipeline Corporation (Northwest) is a privately owned company (i.e. not owned by the Shoshone-Bannock Tribe). The site is a natural gas compressor station.

- d. Emission Units and Emission Generating Activities

Northwest provided in their application the information contained in Table 1. Table 1 lists emission units, a description of emission generating activities, and information regarding any control devices. Except as noted below, Northwest was unable to identify the date of installation of most equipment. The date of installation and any modification to the equipment can be important for determining the applicability of some federal standards (see further discussion in Section 4 - Applicable Requirements).

Part 71.5 (c)(11)(ii)(A) and (B) allow sources to separately list in the permit application such units or activities that qualify as “insignificant” based on potential emissions below two tons/year for all regulated pollutants that are not listed as hazardous air pollutants (“HAP”) under Section 112(b) and below 1000 lbs/year or the de minimus level established under Section 112(g), whichever is lower, for HAPs. However, the application may not omit information needed to determine the applicability of, or to impose, any applicable requirement, or to calculate the permit fee. Units that qualify as “insignificant” for the purpose of the Part 71 permit application are in no way exempt from applicable requirements or any requirements of the Part 71 permit.

Table 1

Emission Units and Control Devices

Northwest

Emissions Unit and Unit ID #	Description	Control Device
Unit 1, TLA-6	<ul style="list-style-type: none"> Clark Turbine (14.8 MMBtu/hr) Serial # 73546 installed 1956 	none
Unit 2, TLA-6	<ul style="list-style-type: none"> Clark Turbine (14.8 MMBtu/hr) Serial # 73547 installed 1956 	none
Unit 3, TLA-6	<ul style="list-style-type: none"> Clark Turbine (14.8 MMBtu/hr) Serial # 73548 installed 1956 	none
Unit 4. TCV-10	<ul style="list-style-type: none"> Clark Turbine (21.7 MMBtu/hr) Serial # 107027 installed 1956 	none
Unit 5, Generator	<ul style="list-style-type: none"> Caterpillar 3408 standby generator Serial # CA 00844 installed 1998 400 hp 	none
Unit 6, Boiler	<ul style="list-style-type: none"> Sellers C80W Boiler Serial # 99401 (3.515 MMBtu/hr) 1315 hp 	none
Unpaved Roads Source 7	<ul style="list-style-type: none"> 	none
Paved Roads Source 8	<ul style="list-style-type: none"> Less dust is caused by vehicle use on paved roads 	none

e. Potential to Emit

Table 2 includes potential to emit (PTE) data provided by Northwest and, in some cases revised by EPA, as discussed below. PTE means the maximum capacity of Northwest to emit any air pollutant (criteria or HAPs) under its physical and operational design. Any physical or operational limitation on the maximum capacity of Northwest to

emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, may be treated as part of its design if the limitation is enforceable by EPA. PTE is meant to be a worst case emissions calculation and is used in many, though not all, cases to determine the applicability of federal requirements.

Each emission estimate in Table 2 relies upon the use of an “emission factor”. Emission factors are numbers derived from testing of emissions from one or more facilities. The emissions measured by the tests are correlated to some production rate or some other easily measured quantity. An emission factor is thereby developed which can be used to estimate emissions by simply multiplying the emission factor by the production rate or other specified known quantity. Emission factors are obtained from industry, state, and federal studies and are meant to be industry averages. Emission factors can also be derived from a source specific emissions test as was done for particulate matter from the boilers at this facility. In any event, although widely used, emission factors can only *estimate* emissions. For applicability and compliance purposes, it is the responsibility of the source to accurately characterize and estimate their own emissions and appropriately use emission factors. Inaccurate characterization and estimation of the source’s emissions could result in an enforcement action.

Soot, dust, and other air pollution in the form of particles are measured two ways: as particulate matter of 10 microns or less (PM10) and as total particulate (PM). PM10 is a subset of PM. In other words, PM emissions will always be the same as or larger than PM10 emissions. Similarly, pollutants that are categorized as hazardous air pollutants (HAP) are almost always in the form of particulates (e.g., PM10 or PM) or volatile organic compounds (VOC), as well. Therefore, in evaluating the data in Table 2, it is important to be aware that some of the air pollutants are double counted.

Table 2

Actual Emissions in Tons per Year for Fee Calculation

Northwest

Emission Unit and Unit ID	Air Pollutants						
	N0x - oxides of nitrogen PM - particulate matter CO - carbon monoxide	VOC - volatile organic compounds PM10 - particulate matter with a diameter 10 microns or less HAP - hazardous air pollutants (Clean Air Act, Section 112(b))	SO2 - sulfur dioxide				
	NOx	VOC	SO2	EPA SO2	PM10	CO	HAPs
Unit 1 TLA-6	211.30	6.30	0.32	0.179	0.43	15.03	0.056842
Unit 2 TLA-6	190.27	5.68	0.29	0.161	0.38	13.54	0.049052
Unit 3 TLA-6	198.99	5.94	0.30	0.168	0.40	14.16	0.050816

Unit 4 TVC-10	392.10	5.47	0.51	0.282	0.67	80.55	0.085556
Unit 5 Generator	0.01	1.81E-4	3.6E-6	2.1E-5	1.19E-4	0.02	1.98E-4
Unit 6 Boiler	0.44	2.40E-2	2.6E-3	1.6E-1	3.31E-2	0.37	8.21E-3
Unit 7 Unpaved Roads*					(7)*		
Unit 8 Paved Roads*					(7)*		
TOTALS	993.11	123.67	1.42	1.740	23.41	1.92	0.25

* The emissions from this unit are considered “fugitive,” as defined in 40 CFR Part 71 .

Table 3

Prevention of Significant Deterioration
Significant Emission Rate Increases for Existing Major sources

Pollutant	Emission Rate in Tons per Year
Particulate Matter (PM)	25
Fine Particulate (PM10)	15
Sulfur Dioxide (SO ₂)	40
Nitrogen Oxide (NO _x)	40
Volatile Organic Compounds (VOC)	40
Carbon Monoxide (CO)	100
Lead	0.6
Fluorides	3
Sulfuric Acid Mist	7
Hydrogen Sulfide (H ₂ S)	10

Total Reduced Sulfur Compounds (TRS) - including H ₂ S	10
Municipal Waste Combustor (MWC) acid gases	40
MWC metals	15
MWC organics	3.5 X 10 ⁻⁶
Municipal Solid Waste Landfills - Non-Methane Organic Compounds	50
Chlorofluorocarbons (CFCs) and Halons	any emission rate

As discussed in section 3(f), except for the restarting of the facility in 1986, based on information provided by the source, EPA has not drawn any conclusions regarding compliance with past PSD permitting requirements at this facility and no enforcement shield is implied or granted.

j. Other Requirements

Based on the information provided in Northwest's application, EPA has no evidence that this source is subject to any existing applicable federal CAA programs except those discussed above. Federal CAA programs include Prevention of Significant Deterioration (PSD), New Source Performance Standards (NSPS), National Emission Standards for Hazardous Air Pollutants (NESHAP), and the acid rain program under Title IV of the CAA. Further, Northwest is not subject to any state implementation plan (SIP) requirements which are applicable within state jurisdictions. Therefore, based on information provided by the source in the application, except for the generally applicable requirements of the chemical accident prevention program, the stratospheric ozone protection program, and the demolition and renovation requirements, Northwest is not subject to any other substantive requirements that control their emissions under the CAA.

EPA recognizes that, in some cases, sources of air pollution located in Indian country are subject to fewer requirements than similar sources located on land under the jurisdiction of a state or local air pollution control agency. To address this regulatory gap, EPA is in the process of developing national regulatory programs for preconstruction review of major sources in nonattainment areas and of minor sources in both attainment and nonattainment areas. These programs will establish, where appropriate, control requirements for sources that would be incorporated into part 71 permits. To establish additional applicable, federally-enforceable emission limits, EPA Region 10, in consultation with Tribes and other stakeholders, has drafted a Federal Implementation Plan (FIP) that will establish federal requirements for sources in Indian Country within Region 10. The Region hopes to propose this FIP within the year. EPA will establish priorities for its direct federal implementation activities by addressing as its highest priority the most serious threats to public health and the environment in Indian country that are not otherwise being adequately addressed. Further, EPA encourages and will work closely with all tribes wishing to develop Tribal Implementation Plans (TIPs) for approval under the Tribal Authority Rule. EPA intends that its federal regulations

created through a FIP will apply only in those situations in which a tribe does not have an approved TIP.

5. Use of All Credible Evidence

Determinations of deviations, continuous or intermittent compliance status, or violations of the permit are not limited to the testing or monitoring methods required by the underlying regulations or this permit; other credible evidence (including any evidence admissible under the Federal Rules of Evidence) must be considered by the source and EPA in such determinations.

6. Annual Emission Inventory and Fee Submittal

Northwest is required to provide an annual emissions inventory of their actual emissions for the preceding calendar year and to pay fees based on that inventory. EPA has included in Tables 4 and 5 below the equations and emission factors, modified by EPA as discussed in section 3.e, that Northwest used to calculate their emissions and to pay their initial fees. These equations and emission factors are based on information provided by Northwest in their application. Northwest has an ongoing obligation to assure that all data in their application is correct and to notify EPA of any errors or omissions (See permit term IX.A.(b)). Also, Northwest is required to certify to the accuracy and completeness of all data submitted to EPA, including the accuracy of its annual emission inventory. If at any time EPA becomes aware of a more accurate way to characterize the emissions from Pocatello compressor station, through information provided by the source or by any other means, these equations and/or emission factors will be revised. It is EPA's expectation that Northwest will use these equations and emission factors to calculate their annual emissions and to pay fees unless Northwest can justify, in writing, why a different equation or emission factor or other estimation methodology more accurately represents their emissions for the year.

All of the calculations in Tables 4 and 5 rely upon emission factors. Please see the discussion of the uses and limitations of emission factors above under 3(f). Table 6 describes the source of each emission factor used in Tables 4 and 5.

Table 4

Calculating Actual Annual Emissions

for Fee Purposes for Point Sources
Emissions Units 01 through 08

Calculate actual annual emissions, for fee purposes, for emission units 01 through 08 using the following equation and data specified in Table 4 below:

$$E = EF \times P \times K$$

Where:

E = pollutant emissions in tons/year;

P = recorded rates for the process parameters or actual annual throughput for process parameter identified in Table 5;

EF = emission factor from Table 5; and,

K = 1 ton/2000 lbs for conversion of actual annual emissions from pounds per year to tons per year.

Emissions Unit and Unit ID #	Pollutant	Emission Factor (EF)	Emission Factor (Units)	Actual Process Parameters (P)	Process Parameters (units)
Unit 1-3, TLA-6	NOx		lb NOx/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	CO		lb CO/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	SO2		lb SO2/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	VOC		lb VOC/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	PM10		lb PM10/MMcf	cubic feet of natural gas	3(135MMcf)/yr
	HAPs		lb HAPs/MMcf	cubic feet pf natural gas	3(135MMcf)/yr
Unit 4, TVC-10	NOx		lb NOx/MMcf	cubic feet of natural gas	177MMcf/yr
	CO		lb CO/MMcf	cubic feet of natural gas	177MMcf/yr
	SO2		lb SO2/MMcf	cubic feet of natural gas	177MMcf/yr
	VOC		lb VOC/MMcf	cubic feet of natural gas	177MMcf/yr
	PM10		lb PM10/MMcf	cubic feet of natural gas	177MMcf/yr
	HAPs		lb HAPs/MMcf	cubic feet of natural gas	177MMcf/yr
Unit 5, Generator	NOx		lb NOx/cf	cubic feet of natural gas	13022cf/yr
	CO		lb CO/cf	cubic feet of natural gas	13022cf/yr
	SO2		lb SO2/cf	cubic feet of natural gas	13022cf/yr
	VOC		lb VOC/cf	cubic feet of natural gas	13022cf/yr
	PM10		lb PM10/cf	cubic feet of natural gas	13022cf/yr
	HAPs		lb HAPs/cf	cubic feet of natural gas	13022cf/yr

Unit 6, Boiler	NOx		lb NOx/MMcf	cubic feet of natural gas	9.5MMcf/yr
	CO		lb CO/MMcf	cubic feet of natural gas	9.5MMcf/yr
	SO2		lb SO2/MMcf	cubic feet of natural gas	9.5MMcf/yr
	VOC		lb VOC/MMcf	cubic feet of natural gas	9.5MMcf/yr
	PM10		lb PM10/MMCF	cubic feet of natural gas	9.5MMcf/yr
	HAPs		lb HAPs/MMcf	cubic feet of natural gas	9.5MMcf/yr
Unit 7, Paved Roads	PM10		lb PM10/ton	maintenance visits	tons/yr
Unit 8, Unpaved Roads	PM10		lb PM10/ton	maintenance visits	tons/yr

Table 5

**Calculating Actual Annual Emissions
for Fee Purposes for Fugitive Sources**
For Emissions Units 7 and 8 (Roads)

For emission units 7 and 8 (roads), use the following equation, Table 6 below and the potential to emit data available in Table 2:

$$E = \text{PTE} \times \frac{\text{APP}}{\text{MPP}}$$

Where:

E = pollutant emissions in tons/year;

PTE = potential to emit from Table 3 in the statement of basis;

APP = actual process parameter identified in Table B; and,

MPP = maximum process parameter identified in Table B.

Emission Unit and Unit ID #	Pollutant	Maximum Process Parameter (MPP)	Maximum Process Parameter (Units)	Actual Process Parameter (APP)	Actual Process Parameter (Units)
Unit 7, Paved Roads	PM10				
Unit 8, Unpaved Roads	PM10				

Table 6

EMISSION FACTORS USED IN TABLES 3 AND 4

Emissions Unit and Unit ID #	Source of the Emission Factor
Units 1-3	04/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Table 3.1-3
Unit 4	04/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Table 3.1-3
Unit 5	07/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Table 3.2-3
Unit 6	07/2000 EPA Compilation of Air Pollutant Emission Factors, "AP-42" Section 1.4